

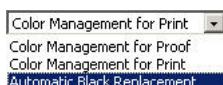
Color Management on the HP DesignJet 50ps

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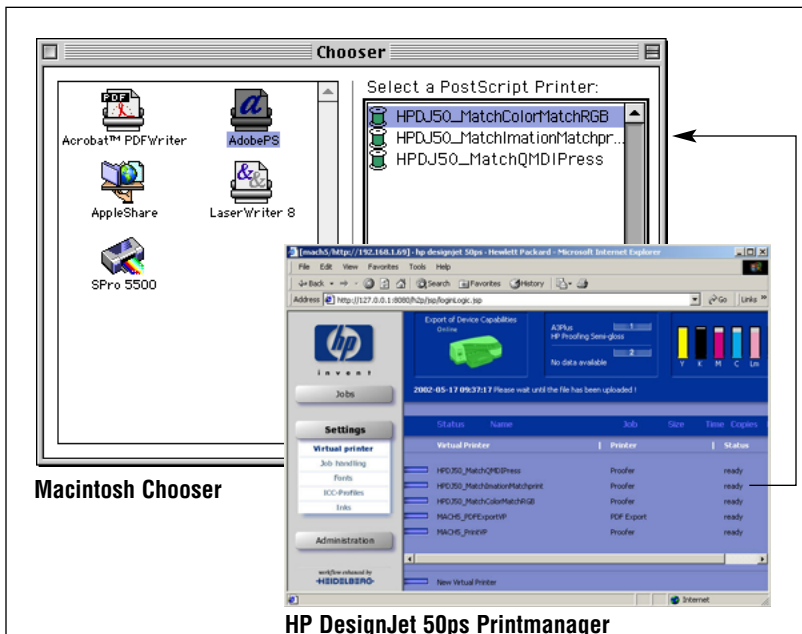
The HP DesignJet 10ps, 20ps, and 50ps were designed to provide high-speed, photo-quality prints at a low cost. The high-end member of the series, the DesignJet 50ps, is intended for professional prepress users who want to make digital proofs that match a specific output device, such as an analog proofing process (Matchprint, Cromalin), a printing press, a color monitor, or other device or process.

The HP DesignJet 50ps printer works with a server-based software RIP from Heidelberg. The RIP offers color management, layout, job handling, and file support functionality to meet the demands of the prepress user.

Like the DesignJet 10ps and 20ps, the DesignJet 50ps uses industry standard ICC (International Color Consortium) color management profiles to print accurate and consistent color. The DesignJet 50ps RIP has two color management settings:



- “Color Management for Print” is used for matching images on the color monitor or for producing photo-quality output that does not necessarily match another process.
- “Color Management for Proof” is used for matching another device. This setting introduces another popup, “Press Profile,” to the color management dialog box. This profile is for the device you want to match, be it an analog proofing process, another printer, or a printing press. To match a device or printer, you will need to have an ICC profile for the device/process, and to import the profile into the RIP software using the Settings>ICC Profiles>Add new ICC profile command.



Macintosh Chooser

HP DesignJet 50ps Printmanager

Macintosh Chooser shows 3 “virtual printers” defined in the HP DesignJet 50ps Printmanager, each with separate matching objectives:

- match ColorMatch RGB working space so prints will match the monitor.
- match Imation Matchprint analog proofing
- match a Heidelberg Quickmaster DI direct-imaging press

The print queues are set up in the Printmanager using the Virtual printer>New Virtual Printer dialog box, then by defining the color management settings for each queue.



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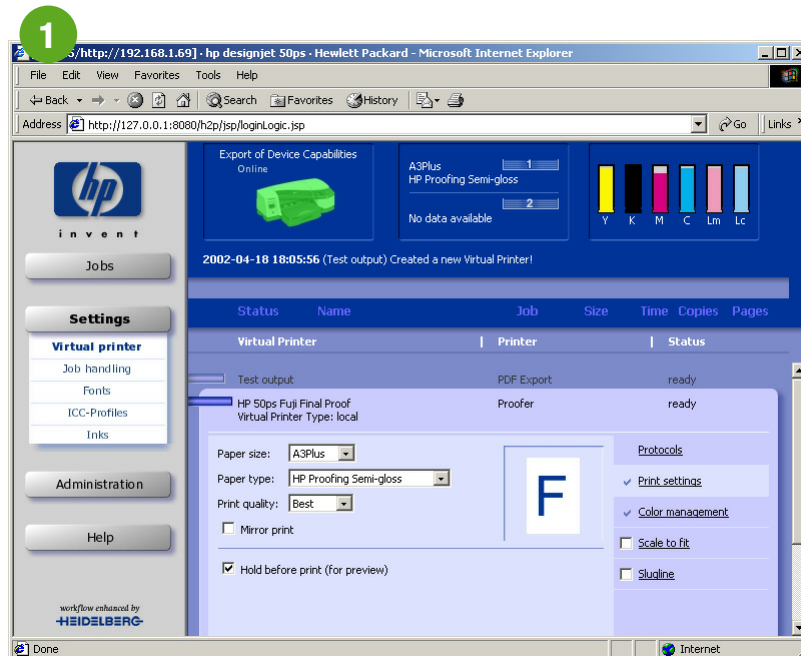
Color Management for Print

The HP DesignJet 50ps RIP software operates through a browser interface. Users can set up multiple “virtual printers,” print queues that apply specific settings for paper, layout, and color management.

New Virtual Printer

To set up a new Virtual Printer:

1. Select Settings>Virtual printer>New Virtual Printer.
2. Select Print Settings
 - a. Choose “Paper size” (e.g., A3Plus).
 - b. Select “Paper type” (should be HP Proofing Gloss, Semi-gloss, or Matte).
 - c. Select “Print quality” (Best).
 - d. Select “Hold before print” if you want to preview jobs prior to printing.



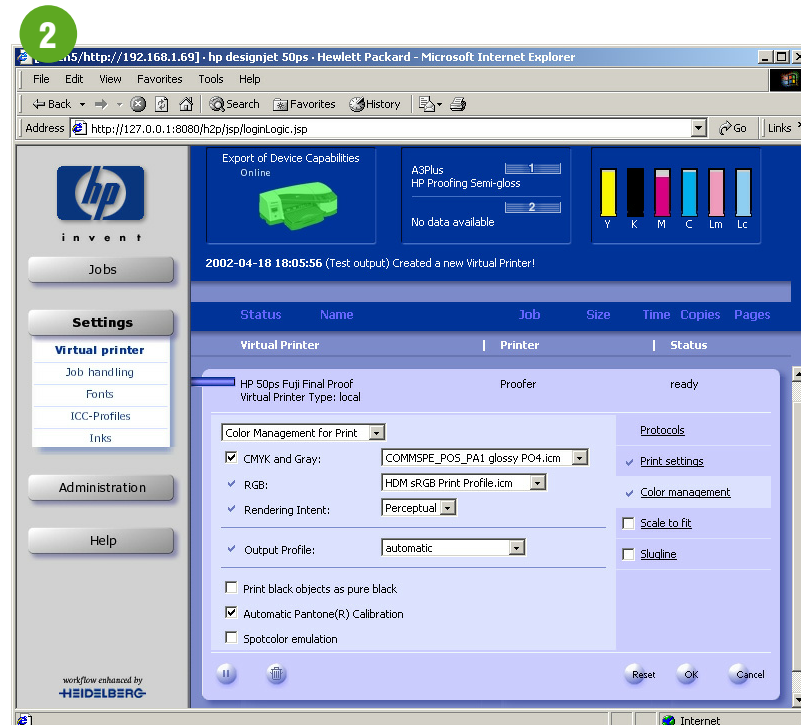
Color Management for Print

Use this setting to make prints that match the computer monitor or the original photo.

- Set “CMYK and Gray” profile to the ICC profile used for CMYK images.
- Set “RGB” to the RGB color working space profile.
- Set “Rendering Intent” to Perceptual.

Other options in the Color Management dialog box include:

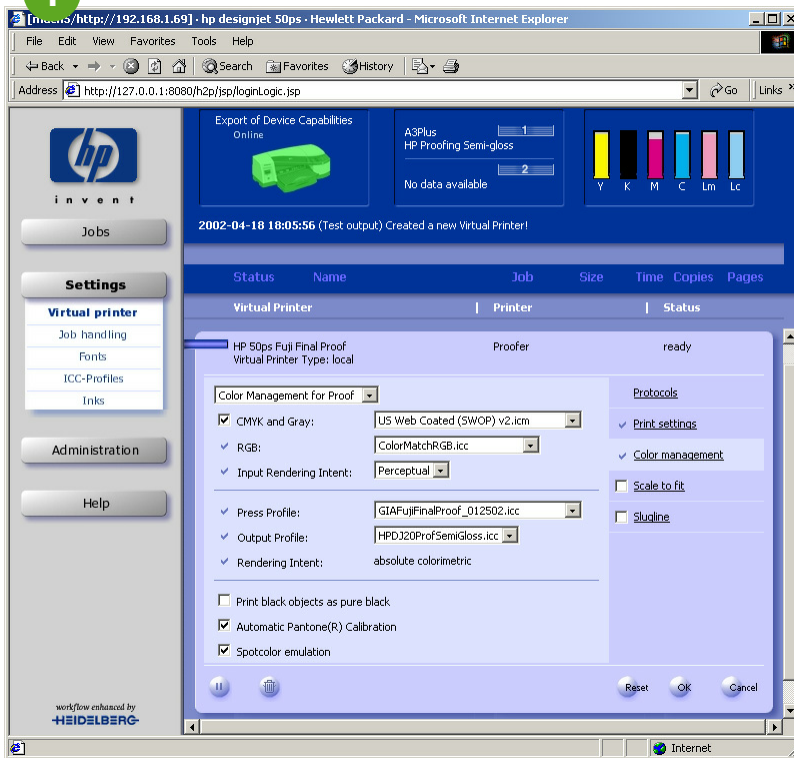
- “Print black objects as pure black”—uses only black ink to print black objects; same as turning “Automatic Black Replacement” off in the DesignJet 10ps/20ps RIP; recommended to turn OFF for most print jobs.
- “Automatic Pantone® Calibration”—same as “Spot color matching” in the DesignJet 10ps/20ps RIP, causes the RIP to look up CMYK formulas to match Pantone spot colors as closely as possible. Should be ON if print jobs contain Pantone colors.
- “Spot Color Emulation”—used to overprint spot colors and blends thereof; should always be ON.





Color Management for Proof

1

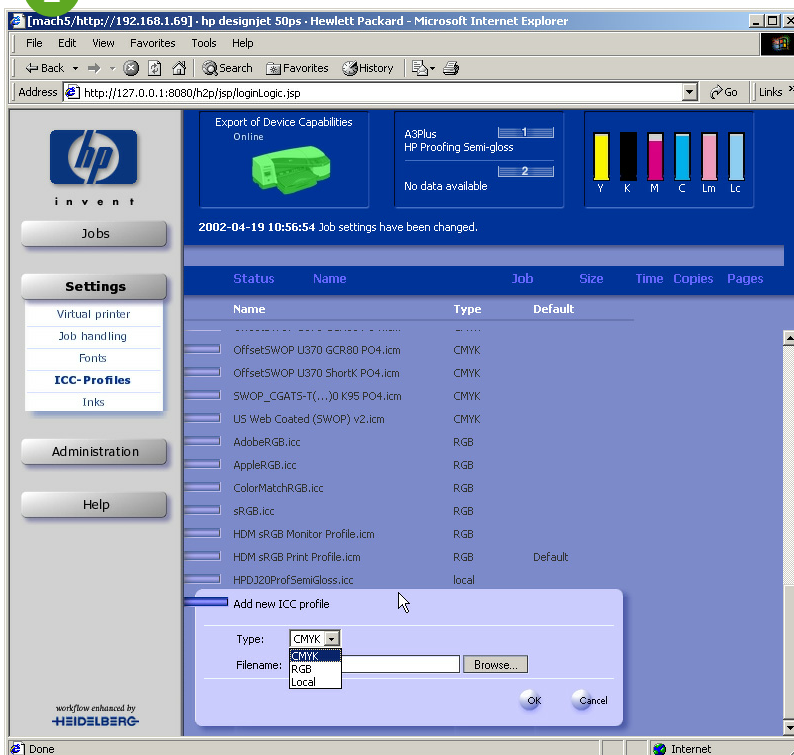


Color Management for Proof

Use this setting to make proofs that match another printer or printing process. To do so you will need an ICC profile of the process you want to match.

1. Set CMYK and Gray to the profile used for converting images to CMYK. (The RIP will read profiles embedded in PDF files.)
2. Set RGB to the profile used for the RGB monitor working space.
3. Set Rendering Intent to Perceptual.
4. Set the Press Profile to the profile of the device or process you want to match.

2



Importing a Custom Profile

You can import an ICC profile that supplied by someone else or that you made with a profiling program. These profiles can be used for CMYK and Grayscale devices, RGB, and for the DesignJet 50ps proofer.

To import a custom profile:

1. Select Settings>ICC Profiles.
2. Click Add new ICC profile at the bottom left of the window.
3. Browse to find the profile you would like to add.
4. Profiles for the DesignJet 50ps proofer should be imported as "Local" profiles.

When making a custom profile of the DesignJet 50ps, turn color management OFF before printing your CMYK target by deselecting the "CMYK and Gray" profile checkbox.